

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003921

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/10 C12N15/66 C12P19/34 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12P C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, CAB Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
D1 X	HAI-BAO CHEN ET AL: "A NEW METHOD FOR THE SYNTHESIS OF A STRUCTURAL GENE" NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 18, no. 4, 25 February 1990 (1990-02-25), pages 871-878, XP000099685 ISSN: 0305-1048 figure 1	1-4, 10, 15, 16
D2 X	WO 97/42330 A (APOLLON INC) 13 November 1997 (1997-11-13) page 7, line 19 - page 9, line 36; figures 1-6	1-4, 10, 22
D3 X	WO 00/29616 A (PERKIN ELMER CORP) 25 May 2000 (2000-05-25) claims 1-22; figures 1-6	1-4, 10, 15, 16
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

26 October 2004

Date of mailing of the international search report

08/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hornig, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003921

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
D4 Y	"ENZYMATICALLY PRODUCED COMPOSITE PRIMERS: AN APPLICATION OF T4 RNA LIGASE-COUPLED PRIMERS TO PCR" BIOTECHNIQUES, EATON PUBLISHING, NATICK, US, vol. 19, no. 2, August 1995 (1995-08), page 182,184,186, XP001160946 ISSN: 0736-6205 the whole document	1-4,10, 21,22
D5 Y	WO 89/11211 A (BIOTECHNOLOG FORSCHUNG GMBH) 30 November 1989 (1989-11-30) the whole document	1-4,10, 21,22
D6 A	ANTSON D O ET AL: "PCR-generated padlock probes detect single nucleotide variation in genomic DNA." NUCLEIC ACIDS RESEARCH. 15 JUN 2000, vol. 28, no. 12, 15 June 2000 (2000-06-15), page E58, XP002302312 ISSN: 1362-4962 cited in the application the whole document	
D7 A	MYER S E ET AL: "SYNTHESIS AND APPLICATION OF CIRCULARIZABLE LIGATION PROBES" BIOTECHNIQUES, EATON PUBLISHING, NATICK, US, vol. 30, no. 3, March 2001 (2001-03), pages 584-586,589, XP001149146 ISSN: 0736-6205 cited in the application the whole document	
D8 P,X	BORODINA TATIANA A ET AL: "Ligation-based synthesis of oligonucleotides with block structure." ANALYTICAL BIOCHEMISTRY, vol. 318, no. 2, 15 July 2003 (2003-07-15), pages 309-313, XP002302313 ISSN: 0003-2697 the whole document	1-22
D9 P,X	WO 03/106637 A (DATASCOPE INVEST CORP ; ZAK S ARIEH (US); GETTS LORI (US); GETTS ROBER) 24 December 2003 (2003-12-24) claims 14-16	1-4,10, 18,19
D10 P,X	EP 1 327 682 A (BIOSPRING GES FUER BIOTECHNOLO) 16 July 2003 (2003-07-16) claim 1; figures 1,2	1-4,10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/003921

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9742330	A	13-11-1997	US 5851804 A	22-12-1998
			AU 711882 B2	21-10-1999
			AU 2937097 A	26-11-1997
			AU 711110 B2	07-10-1999
			AU 2998697 A	26-11-1997
			CA 2252845 A1	13-11-1997
			CA 2253880 A1	13-11-1997
			EP 0938337 A1	01-09-1999
			EP 0960205 A1	01-12-1999
			WO 9742330 A1	13-11-1997
			WO 9741892 A1	13-11-1997
			US 6143527 A	07-11-2000
WO 0029616	A	25-05-2000	US 5942609 A	24-08-1999
			AT 265545 T	15-05-2004
			AU 770217 B2	19-02-2004
			AU 5783899 A	05-06-2000
			CA 2353076 A1	25-05-2000
			DE 69916877 D1	03-06-2004
			EP 1129215 A1	05-09-2001
			JP 3544945 B2	21-07-2004
			JP 2002531071 T	24-09-2002
			WO 0029616 A1	25-05-2000
WO 8911211	A	30-11-1989	DE 58908694 D1	12-01-1995
			WO 8911211 A2	30-11-1989
			EP 0377015 A1	11-07-1990
			JP 3042626 B2	15-05-2000
			JP 3502641 T	20-06-1991
			US 5114839 A	19-05-1992
WO 03106637	A	24-12-2003	WO 03106637 A2	24-12-2003
EP 1327682	A	16-07-2003	EP 1327682 A1	16-07-2003
			US 2003152984 A1	14-08-2003

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/003921

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☒ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
 - ☐ filed together with the international application in computer readable form
 - ☒ furnished subsequently to this Authority for the purpose of search
2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments: